

**STATE ADVISORY COUNCIL ON  
SCIENCE AND TECHNOLOGY  
M I N U T E S**

**Wednesday, February 28, 2001**

**3:00 - 5:00 p.m.**

**State Office Building, Room 5112**

**Salt Lake City**

**MEMBERS & ASSOCIATE MEMBERS PRESENT**

SAUER, Dennis Alliant Techsystems, Inc.  
JOHNSON, Susan Futura Industries  
HOOPER, Gary Brigham Young University  
GESTELAND, Ray University of Utah  
BREHM, Michael Brehm Environmental LLC  
LUND, Gary Thiokol Corporation  
DOENGES, Peter Evans and Sutherland, Corp  
EMBLEY, Phyllis Jordan School District  
ALLIS, Rick UGS  
KULKARNI, Rajiv Centers of Excellence  
SLATER, Bruce DEQ (For Dianne Nielsen)  
BROKOPP, Charles Department of Health  
ROGERS, Earl Department of Agriculture  
ANDERSON, Doug UDOT

**MEMBERS NOT PRESENT:**

MILLER, Brent Utah State University  
TAKACH, Troy Parvus Corporation

**OTHERS PRESENT:**

DART, Dorothy University of Utah  
WINTERS, Suzanne State Science Advisor  
WALTERS, Clara GOPB

**I. Call to Order/Introductions/Approval of Minutes**

Chair, Sue Johnson called the meeting to order at 3:00 p.m. Everyone introduced themselves. A motion was made to accept the minutes from the January 9, 2001, meeting, as written. Voting was unanimous and the minutes were approved.

**II. Parowan Gap Resolution Review and Adoption - Suzanne Winters**

The draft Resolution for preservation of the Parowan Gap was presented to the Council for adoption. Discussion points brought out were:

- Recommendations for organizations/agencies to which the resolution should be sent
- Publicity - press release
- Confer with UDOT (Utah Department of Transportation) on the status of the additional data they requested from the project archeologist
- Stronger language in the recommendations for action.
- Recommendations encouraging
  - 1) Completion of the research
  - 2) Find resources to preserve the site and protect from further decay

- Agencies involved with the site should be asked to report to the Council on progress
- Comments for changes in the language should be sent to Suzanne. Ex-Officio members present requested information on the Parowan Gap.

**Action Item: Suzanne will reword the resolution, email it out and suggestions for changes to the resolution should come back to her by March 9th.**

**Send a copy of Volume I and II of the Parowan Gap Report to Ex-Officio Member Earl Rogers.**

### **III. Roll of State Advisory Council from Governor's Perspective - Natalie Gochmour**

Natalie Gochmour is the State Planning Coordinator. She worked with Brad Barber in the Governor's Office of Planning and Budget. On Brad's retirement, the Governor appointed Natalie to his position. The Planning Coordinator is linked to the Council by statute.

In a very specific way, the Governor and Chief of Staff, Rich McKeown directed Natalie to formally connect the Council with the Silicon Valley Alliance. The Alliance is a symbol for a broader initiative of the Governor's to make Utah a center for technology.

The Governor is convinced that economic development is what the state should concentrate on because of:  
Characteristics of the labor force

- Labor force growth
- Being close to other technology centers in the west
- Understanding the public sector challenges that are a few years out
- The DEA Section (Demographic & Economic Analysis) of Planning & Budget, looks at long term population projections for Utah, because it's on the cusp of another school enrollment spurt. Starting in 2003 and lasting until 2010, Utah will have 100,000 more school age (K-12) children in the state. This is based on:
  - Migration of the '90s
  - Grandchildren of baby boomers
  - New baby boom from 1978 to 1984

Looking in the long term, the appropriate public policy is an aggressive economic development effort and the Governor feels the Silicon Valley Alliance is a mechanism to accomplish that.

Sue told Natalie the Council feels they can help through a set of suggestions or "White Papers", with special attention to the education system.

Pete Doenges previously gave Suzanne information on a "Simulation High School" and she proposed the Council look into it for a suggestion or "White Paper". She told the group that in Florida, simulation is not just used to train truck drivers and pilots, but for teaching all integrated aspects of high school curricula. The schools partnered with universities and industries and began with an initial enrollment of 600 students. The next year it was up to 4,600 students and has been very successful since.

Natalie thought Simulation Teaching would be an appropriate subject for a "White Paper" and suggested the Council submit it to the Governor by August, to take advantage of the budget cycle. Not all ideas will have budget implications, but some may. The Governor influences the Legislature through his budget. He finalizes his agenda for the budget in November and releases it to the public in December. Items to accomplish as the budget season begins during the summer are:

The Council present signed initiatives, "White Papers" and good public policy recommendations which can be

linked to the Governor's budget.

**Action Item: The Council will write a "White Paper" on Simulation Teaching in High Schools and submit it to the Governor by August.**

#### **IV. Silicon Valley Alliance - Rod Linton**

Mr. Linton is Director of the Silicon Valley Alliance and assists the Governor in his Engineering/Education Initiative. He heads up the Technology Development Division in the Department of Community and Economic Development. Until recently, part of his assignment was to serve as Director in the Centers of Excellence Program for DCED. This program focuses primarily on all Utah's higher education universities, with emphasis on the research universities, to select technologies which have good potential for commercialization. The COE provides grant funding, consulting services and assistance in moving technologies to market. Because the program addresses the technology "push side" of commercialization, they began looking at how to implement a more pro-active roll for businesses to add the "pull" from the market place. The Utah Silicon Valley Alliance has emerged as the tool to reach this goal.

Committees were formed under the Silicon Valley Alliance to identify assets and liabilities for growing more rapidly as a high technology state. The committees presented these to the Governor in a report. In Phase I, these committees looked at evaluation and recommendations. Phase II has begun with the formation of 20 Task Groups. The Task Groups are charged with implementation of the recommendations. The Governor appointed chairs for each of the groups. One Task Group's sole assignment is to identify means of improving the scope and efficiency of technology transfer efforts from our universities. The chair is Dr. Steve Prescott of the Huntsman Cancer Institute. The members of this group include technology transfer officers from the universities and business leaders from the community. The goal of the Task Group is to implement changes that enhance technology transfer relations between the business and university communities in our state.

Another vital Task Group is the Education Task Group. This group will address the Governor's challenge to double the number of engineering graduates in 5 years. The group was chartered to identify obstacles to the Governor's goals and propose and implement solutions.

Rod suggests that there are great ideas and entrepreneurs starting businesses in Utah. The companies may get first and second rounds of venture capital and then either are acquired, fail or move out of state. Utah does not seem to mature businesses beyond the IPO stage into new significant venture groups and seems to lack middle management experience.

Public and headquarter companies generate wealth, in the long term, for the state. Venture capital called "domestic investments" invest money internally, such as retirement funds. The Governor suggested contacting retirement fund management companies, persuade them to invest money in Utah and seed money into local venture capital companies. The message Utah will convey around the world is, "We believe in ourselves."

The time frame for completing the tasks range from 6 months to 5+ years. Money was appropriated by the Legislature for the Silicon Valley Alliance. The Alliance is somewhat paced by the budget cycle and legislature. Appropriations and/or legislation to implement decisions will be sought often. The website, for information on The Silicon Valley Alliance, including a complete list of the task groups is: [www.utah.org/silicon](http://www.utah.org/silicon).

Sue Johnson called attention to the Council's Plan of Action for 2001-2002. After much discussion, the Council will focus upon:

- Science/engineering/technology (SET) education
- Support the Silicon Valley Alliance
- Promotion of learning centers and informal science education for K-12 education as a resource for science

teachers

- SciTech@ Library Square
- Discovery on Wheels
- The Children's Museum
- Hansen Planetarium
- Living Planet Aquarium

Ways to focus on informal science

- Creation of guidelines for informal science programs
- Coordination of science out-reach programs
- Target graduating students who remain in the state to enter into SET fields in Utah

The Council agreed to concentrate on the education Task Group and listed how they would fine-tune their contribution to that Task Group:

- Create a sub-committee to present ideas to Education Chairman, Dave Pershing
  - Create an alliance with school teachers to encourage and support them in science teaching
  - Understand the short comings and what teachers think. Where is the disconnect between the vision of what technical teachers should be, the needs of the state to grow and the reality of getting it to happen? Get a problem statement that is accepted as relevant
  - Utilize Florida's technical school solution, Simulation Teaching, as a model which is connected with National Simulation Center in several state government initiatives in this state. Contacts through Pete Doenges offered to help the Council and will provide more information.
  - Industry could be the tool to bring it to fruition
  - Suggest UEA be part of the Group
  - Take examples from private schools to incorporate into school education
  - Many schools focus on science, mathematics and computer science
  - Bonuses for teachers who teach science and technology, generated by legislature or by businesses
  - Programs for SET businesses to donate time and technology
  - Create a software training center (Intel)
  - Go to businesses and involve them with training of students
  - Seek businesses who would create/donate videos, resources and time to students statewide
- Example: Ag In The Classroom, in which the Dept. of Agriculture donates resources and time to schools
- Contact businesses to produce videos that talk about their companies, are informative and entertaining to highschool students
  - Empower teachers in public schools to teach science
  - Give them the tools to do their job
  - Create an "Endorsement Program" for science teachers who want to teach science/technology curricula
  - White paper to the Education Task Group on What can we do as a state to promote science and technology?
  - Be a voice to the legislature about money that impacts science/technology
  - By statute the Council reports to the Governor and Legislature, so the Council could lobby the Legislature
  - Hire a Lobbyist
  - Contact Craig Peterson to volunteer his skills

Sue requested the Council send their comments/ideas about the Education Task Group to either Suzanne or herself.

A sub-committee was selected from volunteers to meet with Dave Pershing, Chair of the Education Task Group, before the next Council meeting on April 25th.

- Ask how the Council can interface with the Education group
- Look at existing models upon which we can put together an idea for the Council to focus upon.

The members are: Gary Lund, Pete Doenges, Sue Johnson, Ray Gesteland and Suzanne Winters. The

sub-committee will propose a strategy after meeting with Dr. Pershing.

Suzanne's goal is for each of the Council members to participate on at least one of the Task Groups of the Silicon Valley Alliance. After reviewing the handout listing the Task Groups and their missions, please identify one on which you'd like to participate. As discussed, please contact the chair of the group directly, but also notify Suzanne. If the Education Task Group is your choice, please hold off contacting Dave Pershing, but let her know.

**Action Item: Meet with Dr. Pershing of the Education Task Group and present a strategy for the next Council meeting.**

**Each member will contact Suzanne with the name of the Task Group he/she would like to serve on.**

#### **V. SAC Future Activities /Discussion**

The deadline for receiving nominations for the Governor's Medal Awards is March 15th. Suzanne is expecting a good return because 2000 letters were sent out this year.

The Executive Committee is invited to a Cabinet meeting in the Governor's Office on April 11, 2001, at 9:00 a.m. The Cabinet consists of department heads from state government, who meet once a month with the Governor. When the Executive Board discussed the roll of the State Advisory Council with the Governor, in December, he suggested the best opportunity for the Council to provide a service to the state was to work directly with the department heads. As a result, the Executive Board has been invited to attend a Cabinet meeting, introduce themselves and ask the departments if they have issues the State Advisory Council may assist with.

**The remaining meetings this year will be held at 2:00 p.m.**

#### **VI. Adjourn**

The meeting was adjourned at 5:00 p.m.